

The Claims

1. (previously presented) A bacterial strain for production of polyhydroxyalkanoates wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene, wherein the nuclease gene product is secreted into the periplasmic space and released when the bacteria is lysed.
2. (previously presented) The bacterial strain of claim 1 wherein the nuclease gene product is released in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced.
3. (original) The bacterial strain of claim 2 which produces a polyhydroxyalkanoate to levels of at least 40% of its dry cell weight.
4. (previously presented) The bacterial strain of claim 1 for use in an aqueous process to manufacture poly(3-hydroxyalkanoate) granule suspension which is essentially free of nucleic acids.
5. (cancelled)
6. (original) The bacterial strain of claim 1 wherein the nuclease gene is a heterologous gene obtained from an organism other than the bacterial strain.

RESPONSE TO OFFICE ACTION

7. (previously presented) A bacterial strain for production of polyhydroxyalkanoates, wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene integrated into the chromosome of the bacterial host, wherein the nuclease gene product is secreted into the periplasmic space and released when the bacteria is lysed.

8. (original) The bacterial strain of claim 1 wherein the nuclease is expressed in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours.

Claims 9-10. (cancelled)

11. (withdrawn – previously presented) A fermentation process comprising adding to a growth medium a bacterial strain for production of polyhydroxyalkanoates, wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene, wherein the nuclease gene product is secreted into the periplasmic space and released when the bacteria is lysed.

12. (withdrawn – previously presented) The process of claim 11, wherein the bacterial strain is grown to cell densities of at least 50 g/l, and the nuclease gene product is released in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the product is enhanced.

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13. (cancelled)

14. (withdrawn – previously presented) The process of claim 12 further comprising growing the bacterial strain to produce levels of at least 40% of its dry cell weight.

15. (withdrawn – previously presented) The process of claim 11 further comprising lysing the cells.

16. (withdrawn – previously presented) The process of claim 14 further comprising using an aqueous process to manufacture a poly(3-hydroxyalkanoates) granule suspension which is essentially free of nucleic acids.

Claims 17 and 18. (cancelled)

19. (withdrawn – previously presented) A fermentation process comprising adding to a growth medium a bacterial strain for production of polyhydroxyalkanoates, wherein the bacterial strain is selected from the group consisting of *Ralstonia eutropha*, *Pseudomonas putida* and *Escherichia coli* and is genetically modified to express a heterologous nuclease gene integrated into the chromosome of the bacterial strain, wherein the nuclease gene product is secreted into the periplasmic space and released when the bacteria is lysed.

Claim 20. (cancelled)

21. (withdrawn – previously presented) The process of claim 11 wherein the strain expresses nuclease into the periplasmic space in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of cells in less than 24 hours.

Claims 22-23. (cancelled)